Overview

This document describes the basic details needed when departments are requesting simple chatbot services from ITSD. Simple chatbot services include non-conversational responses for simple questions. Responses can include links to other services or prompts to other question and answer pairs that could be answered.

How much does it cost?

The infrastructure costs depend on the number of messages you have in a month. Below is a breakdown for cost to have a Production service. If you require changes to the standard bot framework, a development instance must be included.

<u>Service</u>	Monthly		Monthly Per 100	
QnA Maker (Cognitive Services) - \$10 per month	\$	10.00		
Azure Search (Basic Plan) - \$74 per month	\$	74.00		
Azure App Service Plan (S1) - \$73 per month	\$	73.00		
Azure Bot Service - \$0.50 per 1000 messages			\$	0.50
Azure SQL DB - \$15 per month	\$	15.00		
Total	\$	172.00		

Message Count (Q&A total)	Message Cost	Environment/Messages Cost		
100,000	\$ 50.00	\$ 222.00		
1,000,000	\$ 500.00	\$ 672.00		
2,000,000	\$ 1,000.00	\$ 1,172.00		
5,000,000	\$ 2,500.00	\$ 2,672.00		

What information do I need to provide?

ITSD needs to know basic details when you are requesting a bot service to help you get started.

Team members

What agency team members will be dedicated to creating and updating the knowledge base? Provide both their names and network accounts so we can grant access to the appropriate services. Your network account is the name of the account that you log on to your PC with the format domain\username. ITSD will also need to provide training to those team members for creating and updating the knowledge base.

The amount of time your team will spend creating and maintaining the knowledge base will depend on the complexity of your bot. Expect one to two weeks before a service is ready to go live. Once the bot goes live the team will need to dedicate time to review the performance of the bot and work to improve the bot. The amount of time your team spends varies based on the complexity of the bot. So far we have seen that agencies probably need 2-3 knowledgeable agency staff initially to get the bot setup and then a minimum of 1 person to continually "train" the bot after go-live as questions from the public come in.

Bot Basics

Some helpful questions to answer:

- 1. What is the general purpose of this bot?
- 2. If the bot cannot answer a question, what would you like the answer to be? An example from the COVID bot is:
 - I'm sorry. I do not have that information. Please try asking another way. For further assistance, please visit https://health.mo.gov/coronavirus. If you prefer to talk to a person, call our 24 hour hotline at 877-435-8411.
- 3. It's important for the citizens to know they are not talking to a live person. What would you like the standard Hello message to say? An example from the COVID bot is:
 - Hi, I am a virtual assistant programmed to answer your questions. Enter a question below and I'll do my best to answer it.
- 4. When someone asks a long question it can be difficult for the bot to answer accurately. We can configure how many characters a long question is. We have defaulted to 150 characters. What response would you like to send when someone asks a long question? An example of a response to a long question in COVID bot is:

It seems like you have a really specific question. This automated bot will understand your question better if it is shorter. If you need a personal question answered regarding COVID, we recommend that you call our 24 hour hotline at 877-435-8411.

5. Would you like a specific icon for your bot? This is the image that displays when the bot is responding to a question. Here is what we have defaulted for the COVID bot:



- 6. How would you like to manage the training of the bot? You can use the QnA Maker tool to work directly with the recommended suggestions the bot has learned as people have used the bot. However, this does not track unanswered questions or those answers that a person marked as not answering their question. ITSD can create a work queue for your team to review for all of these items. Every time a question is unanswered or marked as not answering the person's question, a work item will be logged. Another option is for a dashboard report that enables your team to review the data at a higher level. ITSD can work with you to show both of these options to see what works best for your team.
- 7. Will you be creating the page for your bot to live or do you need ITSD to create a page for you? If you have team members creating web pages, the bot just needs a single line of code for your chatbot. ITSD can help your team to incorporate your bot into a page or create a page for you.

ITSD has my bot service ready. What's next?

Once your bot service is created, your team needs to create your knowledge base. ITSD will help train your team so they can create the knowledge base. The amount of time your team will spend creating the knowledge base will depend on the complexity of your bot. Expect one to two weeks before a service is ready to go live.

Once you have created your knowledge base, it is recommended that you have many people test your bot on an internal site (only accessible while on the State network). Once they have done a round of testing, have your team:

- 1. Review suggestions in the QnA Maker
- 2. Review any unanswered questions and add to your knowledge base
- 3. Review answers marked as not answering the question and add to your knowledge base

You may want to repeat the testing process for up to three rounds to get the best initial release for the citizens.

When can I expect my chatbot to be ready for my citizens?

Once ITSD has your **Bot Basics** you can expect your services to be ready in about a day. Then you need to create your knowledge base. Expect one to two weeks for creating, testing, and training of the knowledge base before being ready for release.

How much time does my team need to spend once we go live?

This really depends on the complexity of your bot. Plan to dedicate some time each week reviewing and training the knowledge base. If your bot isn't working well for your citizens, they will stop using it.

Helpful Links

QnA Maker

Edit a knowledge base - QnA Maker - Azure Cognitive Services

Multi-turn conversations - QnA Maker - Azure Cognitive Services

Improve knowledge base - QnA Maker - Azure Cognitive Services

Markdown format - QnA Maker - Azure Cognitive Services

Import document format guidelines - QnA Maker - Azure Cognitive Services

URLs types supported for import - QnA Maker - Azure Cognitive Services

Request for Chatbot - Basic Bot Details

Team Members:

Name	Network account (domain\account)

- 1. What is the general purpose of this bot?
- 2. If the bot cannot answer a question, what would you like the answer to be?

Example: I'm sorry. I do not have that information. Please try asking another way. For further assistance, please visit https://health.mo.gov/coronavirus. If you prefer to talk to a person, call our 24 hour hotline at 877-435-8411.

3. It's important for the citizens to know they are not talking to a live person. What would you like the standard Hello message to be?

Example: Hi, I am a virtual assistant programmed to answer your questions. Enter a question below and I'll do my best to answer it.

4. When someone asks a long question it can be difficult for the bot to answer accurately. We can configure how many characters a long question is. We have defaulted to 150 characters. What response would you like to send when someone asks a long question?

Example: It seems like you have a really specific question. This automated bot will understand your question better if it is shorter. If you need a personal question answered regarding COVID, we recommend that you call our 24 hour hotline at 877-435-8411.

5. Would you like a specific icon for your bot? This is the image that displays when the bot is responding to a question.



6.	How would you like to manage the training of the bot? ☐ Create a dashboard overview report ☐ Create a work queue for all items ☐ I'm not sure. I need you to show me.
7.	Will you be creating the page for your bot or do you need ITSD to create a page for you?